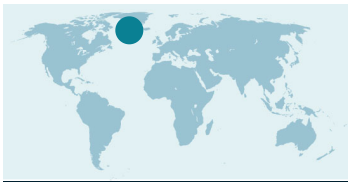
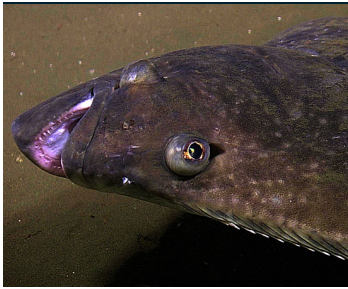


3 | Active Harvest Strategy

Greenland Halibut



Management Authority:

North East Atlantic Fisheries Commission

Adoption Year:

Adopted in 2010; Updated in 2017

Management Objectives:

- Restore to within a prescribed period of time or maintain at B_{MSY} (chance of $B_{2037} < B_{MSY}$ is $\leq 50\%$)
- The risk of failure to meet the B_{MSY} target and interim biomass targets within a prescribed period of time should be kept moderately low
- Low risk (<30% chance) of exceeding F_{MSY}
- Very low risk (<10%) of going below an established threshold [e.g. B_{lim} or B_{lim} proxy]
- Maximize yield in the short, medium and long term (5,10, 20 years, respectively)
- The risk of steep decline of stock biomass should be kept moderately low
- Keep inter annual TAC variation below “an established threshold” (i.e., 15%)

Reference Points:

- **Target reference point:** B_{MSY}
- **Proxy limit reference point:** $30\%B_{MSY}$

Harvest Strategy:

The original HCR adopted in 2010 proved unsuccessful and was modified in 2017. The current harvest strategy will be implemented until 2024, so a new one will be adopted in 2023. If circumstances occur outside the ranges tested by the MSE, the exceptional circumstances protocol will be triggered, possibly changing the HCR.

Specifications:

- **Type:** Empirical
- **Management cycle:** 3 years
- **Data inputs:** Five survey-based abundance indices
- **Management output:** Quota
- **Harvest control rule:** Combination of a target-based and slope-based rule that increases or decreases quota depending on the current TAC and recent trends in survey biomass
- **Other:**
Maximum quota change: +/- 10%

Outcome:

Greenland halibut are considered overfished. The initial HCR adopted in 2010 had to be revised in 2017 as the exceptional circumstance protocol was triggered in 4 out of 6 years, likely due to annual catch estimates far exceeding the TAC. The TAC based on the current HCR increased in 2019 to 16521 t but decreased for 2022 to 15,864 t.

Link to relevant policy document or update:

- [Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies \(WG-RBMS\) Meeting \(https://www.nafo.int/Portals/0/PDFs/COM-SC/2017/com-sc%20doc17-11.pdf\)](https://www.nafo.int/Portals/0/PDFs/COM-SC/2017/com-sc%20doc17-11.pdf): See item 5 on page 5 for harvest strategy specifications
- [Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies \(WG-RBMS\) Meeting: \(https://www.nafo.int/Portals/0/PDFs/COM-SC/2021/com-scdoc21-04.pdf\)](https://www.nafo.int/Portals/0/PDFs/COM-SC/2021/com-scdoc21-04.pdf) See item 4 on page 3 for an update on the harvest strategy